

Notice of Allowability	Application No.	Applicant(s)	
	10/072,292	BELL ET AL.	
	Examiner	Art Unit	
	Kevin S Wood	2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the Applicant's Amendment filed 17 June 2004.
2. ☒ The allowed claim(s) is/are 1,3-13,15-20,37,39-46 and 48-50.
3. ☒ The drawings filed on 12 April 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

Response to Amendment

1. This action is responsive to the Applicant's Amendment filed on 17 June 2004. Claims 21-36 and 51-53 have been withdrawn. Claims 1, 3, 4, 6, 7, 9, 15, 16, 18-20, 37, 40, 42 and 43 have been amended. Claims 2, 14, 38 and 47 have been canceled. Claims 1, 3-13, 15-37, 39-46 and 48-53 are pending in the application.

Drawings

2. The drawings were received on 12 April 2004. These drawings are accepted by the examiner.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jan Little-Washington on 8/11/04.

The application has been amended as follows:

Please cancel claims 21-36 and 51-53.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 3-13, 15-20, 37, 39-46 and 48-50 have been considered but are moot in view of the applicant's amendment.

The applicant amended all of the independent claims to include the allowable subject matter cited in the Non-Final Rejection mailed 11 March 2004. Specifically, the allowable subject matter from claims 2, 14, 38 and 47 has been added to claims 1, 13, 37 and 46 respectively. The prior art does not disclose or make obvious the combination of all the limitations of independent claims 1, 13, 37 and 46. Specifically, the prior art does not disclose that at least one of the plurality of ferrule regions includes a diffractive optical element. Claims 1, 13, 37 and 46 are now allowable over the prior art, along with all the claims that depend from them.

Allowable Subject Matter

5. Claims 1, 3-13, 15-20, 37, 39-46 and 48-50 are allowed.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,347,178 to Edwards et al.

This reference discloses a diffractive optical element surrounding the end of an optical fiber, for the purpose of diffracting the misaligned or spill over light. This reference fails to disclose a ferrule having a plurality of regions where the amount of

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light directed from each region is a function of the alignment between the incoming light and the optical fiber.

U.S. Patent No. 4,911,522 to Iwamoto et al.

This reference discloses an alignment system between pairs of optical fibers, where the misaligned light is leaked through a portion of the cladding of each optical fiber to an optical detector. This reference fails to disclose a ferrule having a plurality of regions where the amount of light directed from each region is a function of the alignment between the incoming light and the optical fiber.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin S Wood whose telephone number is (571) 272-2364. The examiner can normally be reached on Monday-Thursday (7am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney B Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KSW



Rodney Bovernick
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